



SUBJECT: Guidance for Research Project Annual Reports (AD-421) for Fiscal Year 2004  
(October 1, 2003, to September 30, 2004)

TO: Area Directors  
Center Directors  
Institute Directors  
Laboratory Directors  
Research Leaders

FROM: Caird E. Rexroad, Jr.  
Acting Associate Administrator

**REPORTS ARE DUE TO THE NATIONAL PROGRAM STAFF NO LATER THAN  
OCTOBER 1, 2004 – AREA OFFICES WILL ESTABLISH EARLIER DEADLINES FOR  
THEIR REVIEW PROCESS**

This memorandum calls for the annual project reports (AD-421) that are required for each research project and provides guidance for reporting for FY 2004. Some significant changes have been made in several questions to the accompanying guidance.

To see some of the ways ARS uses the information provided in the AD-421s, go to the NPS Home Page (<http://www.nps.ars.usda.gov>) and select one of the National Programs. At the right of each National Program (NP) summary is a link to the National Program Annual Reports (NPARs) from FY 1998 to FY 2003. In addition to the NPAR, each AD-421 report associated with that National Program is also available. The NPS Home Page also includes the ARS Annual Performance Reports (APR). The APRs contain a large number of accomplishments organized around the goals in the ARS Strategic Plan, as required by the Government Performance and Results Act (GPRA) of 1993. The most recent "green sheets" section from the FY 2005 budget document is available on the NPS internal web site at <http://www.npstaff.ars.usda.gov/progstatus>. It is not currently a public document.

Specific guidance follows on how to address each question of the AD-421, noting any changes from previous years, followed by some general comments that may be helpful to you in understanding how this report will be used. Remember, the AD-421 is not a technical document,

and it should be written to be understood by our customers, stakeholders, and interested members of the general public. Avoid the use of “technical jargon.” Please review this memorandum carefully and follow the guidance provided.

### **Annual Reports for Subordinate CRIS Projects:**

Departmental requirements and systems and database restrictions make it necessary for us to gather annual reports for the non-“D” research projects (e.g., specific cooperative agreements (S), grants (G), trusts (T), and reimbursable agreements (R)). This year, the procedures are similar to the ones instituted for the past 3 years.

For all subordinate projects with the exception of the attached list (Appendix A), only Question 4D (Progress Report) is now required. All of the other questions are optional, not mandatory. In Question 4D, a progress report of the project’s activities over the last year will be sufficient. A reference to the associated in-house parent project must be included. While the length of Question 4D is unlimited for subordinate projects, the report should be concise.

In compiling the projects listed in Appendix A, we followed the same criteria used during the last two years. The list includes all non-“D” projects receiving substantial funding from ARS and those specifically identified by NPS or the Area Directors as being likely to have significant research accomplishments to report.

The progress report for these subordinate projects should begin by stating who the project is with (the outside organization) and what in-house project it is associated with, including project number and project title (Example: “This report serves to document research conducted under a reimbursable agreement between ARS and the U.S. Fish and Wildlife Service. Additional details of research can be found in the report for the parent project 6225-12320-001-00D Soil Erosion Research”). Please provide sufficient information to allow NPS and the Area Offices to evaluate the progress of the programmatic activities reported. In addition, in the text of the response, it should be stated how the project relates to the objectives of the related in-house project.

Major accomplishments of the subordinate research projects (accomplishments at the level where they are candidates for inclusion in the National Program Annual Report, budget documents, and/or GPRA reports) should be captured and reported in the parent research project’s AD-421, with credit as appropriate.

3 Enclosures:

Attachment 1 (Guidance on Seven Questions and Scientific Publications)

Attachment 2 (General Comments)

Appendix A

cc: w/encl.

National Program Leaders, NPS

Program Analysts, NPS

D. Rust, NPS

## **Guidance for Completing the Questions in the AD-421**

RLs are asked to carefully adhere to the following instructions. Some information is requested each year to assist non-ARS researchers and our customers and stakeholders, who may have difficulty retrieving prior year reports. In questions 1 and 2, where there should be little change from year to year during the life of a research project, simply copy the information from the previous report and edit/update it accordingly. Please be concise and avoid repeating the same information when responding to different questions. The following provides guidance for responding to each of the 7 questions and publications.

1. **What major problem or issue is being resolved and how are you resolving it (summarize project aims and objectives)? How serious is the problem? Why does it matter?**
  - Provide a concise overview of the problems and objectives being addressed and the approaches your research project is using to resolve them. This information should be consistent with your Project Plan and the National Program Action Plan.
  - To whom is the work relevant/what is the potential impact of the work?
  - Once developed, the answer to this question can be used each year during the life of the research project with only minor editing, if needed.
  
2. **List the milestones (indicators of progress) from your Project Plan.**
  - Provide a list of the milestones from your Project Plan.
  - Definition: A significant event in the project cycle which is used as a control point for measuring progress.
  - Milestones should be clear, concise, and as specific as possible.
  - Once developed, the answer to this question can be used each year during the life of the research project with only minor editing, if needed.
  
3. **Milestones:**
  - A. **List the milestones (from the list in Question #2) that were scheduled to be addressed in FY 2004. How many milestones did you fully or substantially meet in FY 2004 and indicate which ones were not fully or substantially met, briefly explain why not, and your plans to do so.**
    - The Office of Management and Budget has asked ARS to track progress towards meeting the milestones in each research project as part of the President's Management Agenda.
    - The milestones should be consistent with your project's National Program Action Plan(s).
  
  - B. **List the milestones (from the list in Question #2) that you expect to address over the next 3 years (FY 2005, 2006, & 2007). What do you expect to accomplish, year by year, over the next 3 years under each milestone?**
    - Explanation: The Government Performance and Results Act (GPRA) requires ARS to submit an Annual Performance Plan each year with its budget request. The Plan looks ahead for 3 years and we are asking you to identify anticipated

accomplishments for each of the next three fiscal years. The National Program Teams will review the anticipated accomplishments identified in the AD-421s and select the ones that will be used in various budget documents, the GPRA Plan, and the National Program Annual Reports. Not every project will have a significant accomplishment every year, and NPS recognizes the difficulty of predicting future research outcomes, but we expect you to anticipate future accomplishments under each milestone.

- Emphasize the anticipated impacts/outcomes/results of the research.
- If the projected accomplishments you reported last year or the year before need to be updated, revise them and include a brief explanation of why the changes were necessary.

**4. What were the most significant accomplishments this past year?**

**A. Single most significant accomplishment during FY 2004 (one per Research (OOD) Project):**

- Definition: Accomplishment is something successfully completed.
- Each accomplishment should be written in a four- to six-sentence paragraph, addressing each of the following:
  - Specific accomplishment in the reporting period (FY 2004).
  - Why is this accomplishment important?
  - What was done? If some or all of the research was done by a subordinate project, include the name of your laboratory and the names of the cooperating institutions.
  - What was (or could be) its impact, outcome, result, etc.?
- You may provide a “short title” to summarize each accomplishment.
- This format is required in preparing budgetary documents justifying our requests for appropriations.
- For “bridging/interim” research projects, briefly capture the work and accomplishments of the previous research, thus providing a sense of history and continuity unless that work is included in another (close-out) AD-421. If the work is truly new and does not build on an earlier project or if the work has been redirected into new areas, a brief explanation can be inserted here and expanded in 4D Progress Report.

**B. Other significant accomplishment(s), if any.**

- If you have additional significant accomplishments that you want to report, follow the format described in 4A.
- If there are no additional accomplishments to report here, simple enter “none.”

**C. Significant activities that support special target populations.**

- Only if you have specific activities or special outreach efforts that directly benefit the target populations (small farms--defined as under \$250,000 annual gross receipts--or “socially disadvantaged/limited resource/historically underserved” producers).
- If there are no accomplishments to report here, simply state “none.”

**D. Progress Report opportunity to submit additional programmatic information to your Area Office and NPS (optional for all in-house (“D”) projects and the projects listed in Appendix A; mandatory for all other subordinate projects).**

- For in-house (“D”) projects: If you have reached significant milestones, or have other important information to share with the National Program Team, your Area Office, and the public, provide a brief description of the progress here. Remember the progress you report is progress you achieved in FY 2004.
- For Subordinate Projects: Give a brief progress report for FY 2004. As noted earlier, the summary should begin by stating who the project is with (the outside organization) and what in-house project it is associated with (Example: “This report serves to document research conducted under a reimbursable agreement between ARS and the U.S. Fish and Wildlife Service. Additional details of research can be found in the report for the parent CRIS 6225-12320-001-00D Soil Erosion Research.”).
- Also, to repeat, major accomplishments of the subordinate research projects (accomplishments at the level where they are candidates for inclusion in the National Program Annual Report, budget documents, and/or GPRA reports) should be captured and reported in the parent (related in-house) research project’s AD-421, with credit as appropriate (e.g., cite work of cooperating institution).

**5. Describe the major accomplishments over the life of the project, including their predicted or actual impact. This information is especially useful to NPS during the National Program assessment in the 4th and 5th years of the program cycle.**

- The “life of the project” refers to the duration of the current 5-year program cycle.
- Definition: Impact assessment is an imprecise science, so we are suggesting you use a series of criteria to help evaluate the impact of your project’s research: Did the research advance the knowledge in your programmatic area, was the research innovative, was there technology transfer, was there regulatory or policy development, and was there consumer relevance.
- For “bridging/interim” research projects, briefly capture the work and accomplishments of the previous project, thus providing a sense of history and continuity. If the work is truly new and does not build on an earlier project or if the work has been redirected into new areas, a brief explanation can be inserted here.
- Link accomplishments to the milestones in your Project Plan and the Action Plan(s) of the National Program(s).
- In years 1 and 2 of the program cycle, begin to list and describe the major accomplishments of the project. These could include the major accomplishments identified in Question 4 from preceding years.
- As we approach the 4th year of the National Program cycle, the National Program Staff will rely on the information in Question 5 to assess the overall progress of each National Program in preparation for the next National Program workshop.

- In years 3, 4, and 5 of the program cycle, review the information in this section to make sure it tells a comprehensive story of the project's accomplishments since the program cycle was started. Emphasize the impacts and outcomes of the research.
6. **What science and/or technologies have been transferred and to whom? When is the science and/or technology likely to become available to the end-user (industry, farmer, other scientists)? What are the constraints, if known, to the adoption and durability of the technology products?**
- What knowledge, cultural practices, technologies, etc., have been transferred to potential users during FY 2004? Identify tangible accomplishments such as CRADAs, licenses, patents, field days, and other formal steps that have been taken to put information in the hands of users. Do not include the names of individuals or corporations to whom you have transferred technology; identify them more generically (producers, other scientists, consumer organizations, processors, shippers, etc.).
  - Do not list publications in this section.
  - See the guidance regarding Intellectual Property Rights under the section entitled "General Comments" later in this memorandum.
7. **List your most important publications in the popular press and presentations to organizations and articles written about your work (NOTE: Do not list your peer-reviewed publications here; list them under "Publications").**
- Enter only non-peer reviewed publications. The peer-reviewed publications in scientific journals and major presentations to scientific or professional organizations should be entered under "Publications."
  - Enter items in this section only once, in the year they were published or presented.
  - While we have lifted the limit of three publications you can enter in this section, we expect you to be selective and only identify the most important items.
  - For subordinate projects, publications without ARS authors may be listed here.

**Scientific Publications:**

- Enter all peer-reviewed articles that were published during the reporting period. Also enter major presentations (abstracts) to scientific and professional organizations in this section that have an approved ARS-115 Manuscript Approval.
- Enter all publications that have been printed and have not been included in previous annual reports. Do not list articles that are "in press."
- Make sure your publication list is complete and up-to-date in the 4th and 5th years of the current 5-year program cycle. This information will be used, in part, to document productivity in evaluating the National Program's effectiveness. This report may be submitted to external peers as part of the program assessment process. If your publications are not listed here they may not be taken into account.
- See attachment 2 for additional guidance.

## General Comments

- **Who is the intended audience?** The AD-421 is not a technical document, and it should be written to be understood by our customers, stakeholders, and interested members of the general public. **Avoid the use of “technical jargon.”**
- **What is an accomplishment?** The term “**accomplishment**” means “**something successfully completed.**” For the purpose of completing the AD-421, we are not looking for a list of activities, a progress report, or proposed plans. By the very nature of scientific discovery, we do not expect every project to have a significant accomplishment every year. From this year’s experience, NPS selected about **10-15 percent** of the identified accomplishments for inclusion in various annual reports.
- **What is a milestone?** The term milestone means “a significant event in the project, usually completion of a major deliverable” or “indicators relating to intermediate, time bound, targets or objectives which need to be achieved if the project’s purpose is to be achieved, a useful aid to monitoring progress.”
- **What is the proper length?** The length of the AD-421 is not, in itself, an issue. When we revised the format and lifted the 42-line limitation, we expected to receive a more detailed and useful report. However, some of the project reports were too long relative to their content while others were too short. While we are not reimposing length limitations, unnecessarily long project reports defeat the purpose of this process, and the drafters need to use reasonable self-regulation in deciding how much information and detail to include in the report.
- **How do we protect Intellectual Property Rights (IPR)?** If the scientist believes he/she has made a patentable invention or may have a future patentable invention, they must consult with their patent advisor to review the written description of their research results to avoid making a disclosure. In this regard, the scientist should be particularly diligent about consulting with his/her patent advisor when responding to Questions 3-6. Predictive statements made in the AD-421 or elsewhere can negate future patent rights. With careful drafting, you can provide a meaningful annual report without disclosing IPRs.
- **Progress reports from CRADAs and other extramural agreements (Questions 4D, 5, 6) may be subject to special confidentiality clauses.** Because CRADAs may offer cooperators special rights to review draft public disclosures of research conducted under the CRADA, and because cooperators may consider this to be confidential business information, make sure that any report related to your CRADAs (or Trust Fund Agreements) is cleared by the cooperator before it is submitted to the Area Office. Contact your Patent Advisor or Technology Transfer Coordinator, if you have questions on CRADA reports.
- **Use caution when including “high profile” information.** There is guidance already in the field (revised July 2003), regarding the publication, review, and clearance of “high

profile topics” information. Whenever possible, avoid discussing potentially sensitive information, such as strategies for resolving international trade disagreements, recommendations of specific agro-chemicals, or not yet fully developed approaches for solving some potentially controversial issues. If “sensitive” information is included in the AD-421, alert the Area Office for a special review.

- **Use caution when describing work with Select Agents, hazardous chemicals, radioisotopes, or sensitive laboratory techniques/procedures.** Generally, reports for the AD-421 are written in lay terms and critical details that might be used in weapons of mass destruction are not provided. However, you should use caution in providing information on plant or animal pathogens, toxins, hazardous chemicals, or radioisotopes that might have potential use in weapons of mass destruction. These should be discussed in general terms without providing critical details that would provide insight to bioterrorists.
- **Public document - unless otherwise indicated, you should assume that all of the information given in the AD-421 will be made public.** Avoid technical or other terminology that might not be easily understood by our customers, stakeholders, and interested members of the general public. Do not use acronyms unless you have spelled it out the first time it is used.
- **Publication information.** There must be an approved “ARS-115 Manuscript Approval” for every publication. This is mandatory when the AD-421 is entered in ARIS for FY 2004:
  - The citation information will propagate into the AD-421 when the ARS-115 log number is chosen. Any changes in the citation field for FY 2004 will need to be made via modifying the citation through the 115. For guidance on proper format, refer to your Area Program Analyst for new citation instructions. No changes can be directly made in the 421.
  - Do not list any publication(s) other than the current fiscal year. If reporting for fiscal year 2004, do not list any publications with an October 2004 date or later. Prior year publication(s) may be listed in this fiscal year’s reporting time frame only if they were not listed in a prior reporting cycle.